CLAIMS

I/We claim:

1 1. An encoder for compressing image information comprising:

2   a memory configured to store a sequence of characters

3 representing an image; and

4   a processor configured to determine if the stored sequence of

5 characters corresponds to one of a banded image and a page image,

6 to operate in a first mode to encode the stored sequence of

7 characters if the sequence of characters is determined to

8 correspond to the banded image, and to operate in a second mode,

9 different than the first mode, to encode the stored sequence of

10 characters if the first sequence of characters is determined to

11 correspond to the page image.

1 2. An encoder according to claim 1, wherein the processor is

2 further configured to encode the stored first sequence of

3 characters in accordance with a pack-bit compression technique in

4 the first mode of operation and in accordance with a LZW

5 compression technique in the second mode of operation.

1 3. An encoder according to claim 2, wherein:

2   the processor is further configured to encode the stored first

3 sequence of characters in accordance with a pack-bit compression

4 technique in the second mode of operation.

1 4. An encoder according to claim 1, wherein:

2   if the first sequence of characters is determined to

3 correspond to the page image, the processor is further configured

4 to determine if the stored first sequence of characters corresponds

5 to one of a primarily white page image and a primarily black page

6   image, and, if so, to encode the stored first sequence of

7   characters in accordance with a first compression technique while

8   operating in the second mode of operation, and, if not, to encode

9   the stored first sequence of characters in accordance with a second

10 compression technique, different than the first compression

11 technique, while operating in the second mode of operation.

1   5. An encoder according to claim 4, wherein the first compression

2   technique is a pack-bit technique and the second compression

3   technique is a LZW technique.

1   6. A method for compressing image information comprising:

2   receiving image data representing an image;

3   determining if the received image data corresponds to one of

4   banded image data and page image data;

5   encoding the received image data in accordance with a first

6   encoding technique, if the received image data is determined to

7   correspond to the banded image data; and

8   ·encoding the received image data in accordance with a second

9   encoding technique, different than the first encoding technique, if

10 the received image data is determined to correspond to the page

11 image data.

1   7. A method according to claim 6, wherein the first encoding

2   technique is a pack-bit compression technique and the second

3   encoding technique is a LZW compression technique.

1   8. A method according to claim 7, further comprising:

2   encoding the received image data in accordance with the first

3   encoding technique, if the received image data is determined to

4   correspond to the page image data.

1   9. A method according to claim 6, wherein the image data is

2   determined to correspond to page image data, and further
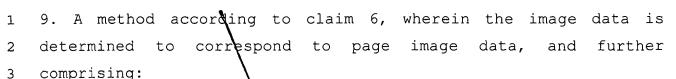
3   comprising:

4   determining if the received image data corresponds to one of

5   primarily white page image data and primarily black page image

6   data;

7   encoding the received image data in accordance with the first

8   encoding technique, if the received image data is determined to

9   correspond to the one of the primarily white and the primarily
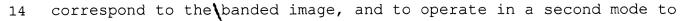
10   black page image data; and

11   encoding the received image data in accordance with the second

12   encoding technique, if the received image data is determined not to

13   correspond to the one of the primarily white and the primarily

14   black page image data.

1   10. A method according to claim 9, wherein the first encoding

2   technique is a pack-bit technique and the second encoding technique

3   is an LZW technique.

1   11. An imaging system comprising:

2   a raster image processor configured to determine if a sequence

3   of characters corresponds to one of a banded image and a page

4   image, to operate in a first mode to encode the sequence of

5   characters if the sequence of characters is determined to

6   correspond to the banded image, and to operate in a second mode,

7   different than the first mode, to encode the sequence of characters

8   if the sequence of characters is determined to correspond to the

9   page image; and

10   an imager controller configured to receive the encoded

11   sequence of characters, and to operate in a first mode to decode

12   the received encoded sequence of characters into the sequence of

13   characters if the encoded sequence of characters is determined to

14 correspond to the banded image, and to operate in a second mode to

15 decode the received encoded sequence of characters into the

16 sequence of characters if the encoded sequence of characters is

17 determined to correspond to the page image.

1 12. A system according to claim 10, wherein the raster image

2 processor is further configured to encode the sequence of

3 characters in accordance with a pack-bit compression technique in

4 the first mode of operation and in accordance with a LZW

5 compression technique in the second mode of operation.

1 13. A system according to claim 12, wherein:

2   the raster image processor is further configured to encode the

3 sequence of characters in accordance with a pack-bit compression

4 technique in the second mode of operation.

1 14. A system according to claim 11, wherein:

2   if the first sequence of characters is determined to

3 correspond to the page image, the raster image processor is further

4 configured to determine if the sequence of characters corresponds

5 to one of a primarily white page image and a primarily black page

6 image, and, if so, to encode the sequence of characters in

7 accordance with a first compression technique while operating in

8 the second mode of operation, and, if not, to encode the sequence

9 of characters in accordance with a second compression technique,

10 different than the first compression technique, while operating in

11 the second mode of operation.

1 15. A system according to claim 14, wherein the first compression

2 technique is a pack-bit technique and the second compression

3 technique is a LZW technique.